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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,434	02/04/2002	Ching-Tien Ho	ARC920010124US1	9534

7590

12/22/2004

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EXAMINER

DAMIANO, ANNE L

ART UNIT	PAPER NUMBER
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2114

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,434

Applicant(s)

HO ET AL.

Examiner

Anne L Damiano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-40 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 16 and 17 is/are rejected.
- 7) ☒ Claim(s) 3-15 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/4/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 29-40 allowed.

The following is an examiner's statement of reasons for allowance:

The primary reason for allowance of claims 29-40 is the inclusion of finding multiple partitions of nodes, each partition having a representative nodes, minimizing the number of nodes or partitions using a weighted graph to establish a routing set of nodes; and returning the routing set of nodes for use in routing messages in the presence of one of more node or link faults, in a method for promoting fault tolerance in a multi-node system, as recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Claims 3-15, 18-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 16 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al (6,680,915).

As in claim 1, Park discloses a general purpose computer system having multiple nodes, comprising:

At least one processor executing method acts to promote tolerance of faults in the system (column 1: lines 10-24), the method acts comprising:

Based at least in part on the faults (column 6: lines 22-27) (urgent messages are in response to faults or a failing condition), determining a set of nodes (routers); and using nodes in the set of nodes only as points on routing paths of messages, and not using any node in the set of nodes for sending or receiving messages (column 3: lines 13-23, lines 42-62, column 4: lines 38-57 column 11: lines 5-15). (The routers of the virtual bus are used only to send messages.)

As in claim 2, Park discloses the system of claim 1, wherein the set is a lamb set (column 4: lines 38-57). (By the definition of a lamb set, given in instant application, the routers of the virtual bus of Park are a lamb set.)

As in claim 16, Park discloses a computer program device comprising:

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A computer program storage device readable by a digital processing apparatus; and

A program on the program storage device and including instructions executable by the digital processing apparatus for promoting fault tolerance in a multi-node system (column 1: lines 10-24), the program comprising:

Means for designating a lamb set of nodes (establishing the routers of the virtual bus) in the multi-node system to be used for routing messages within the system (column 3: lines 13-23, lines 42-62, column 4: lines 38-57 column 11: lines 5-15) (The routers of the virtual bus are used only to send messages. By the definition of a lamb set, given in instant application, the routers of the virtual bus of Park are a lamb set.)

As in claim 17, Park discloses the device of claim 16, wherein the lamb set of nodes contains nodes that are used only in messages routes (column 3: lines 13-23, lines 42-62, column 4: lines 38-57 column 11: lines 5-15). (The routers of the virtual bus are used only to send messages.)

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See PTO-892.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne L Damiano whose telephone number is (571) 272-3658. The examiner can normally be reached on M-F 9-6:30 first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALD



SCOTT BADERMAN
PRIMARY EXAMINER